## BNSF San Diego Yard Emissions

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San Diego
March 24, 2008



## Risk Assessment, OEHHA

## A Guide To Risk Management

Risk managers are responsible for protecting human health, but they must also consider public acceptance as well as technological, economic, social and political factors when arriving at their decisions.



## San Diego

San Diego Classification Yard

Approximately 3,000 long with a width of approximately 300 feet

Bordered to the north and east by East Harbor Drive, to the Beardsley St and to the south by Cesar E. Chavez Parkway

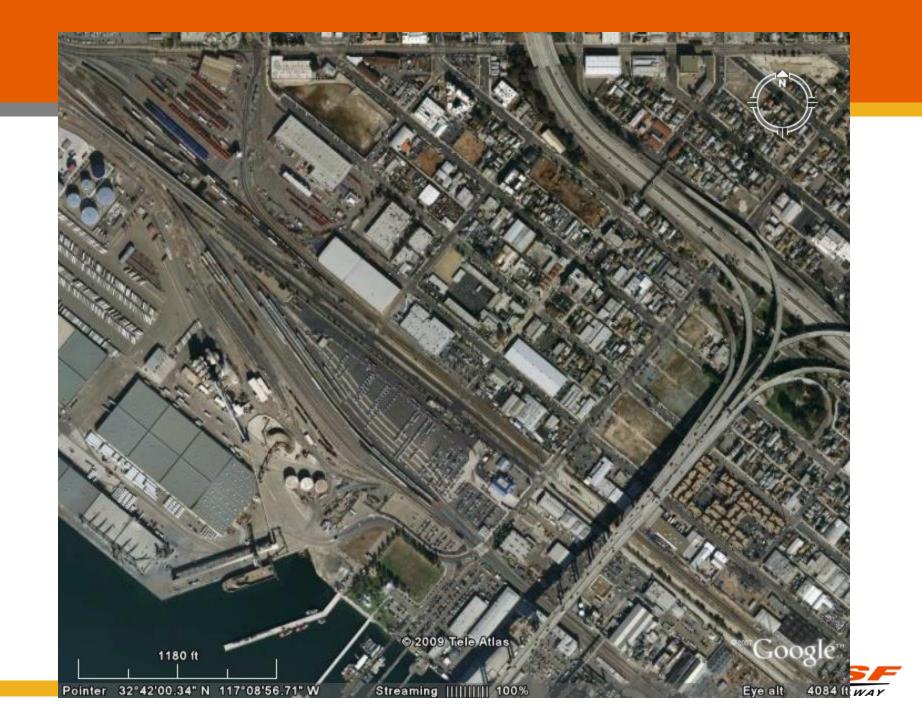
About 1,100 trains per year arrive and depart

4 switch locomotives are used in the yard and immediate area

Some locomotive fueling is performed

No locomotive maintenance performed



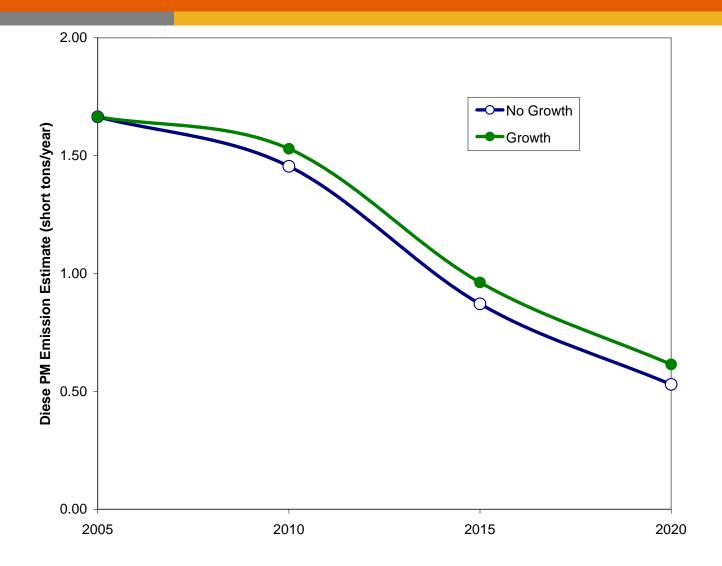


# San Diego Emissions Reductions

San Diego	PM Emissions (short tons)			
Facility Operations	2005	2010	2015	2020
Basic Services	0.00	0.00	0.00	0.00
Switching	0.17	0.12	0.07	0.07
Arriving and Departing Trains	1.47	1.31	0.79	0.45
On-Road Fleet Vehicle	0.00	0.00	0.00	0.00
Other Off-Road TRU	0.02	0.01	0.00	0.00
Other Off-Road Track Maintenance	0.01	0.01	0.01	0.01
Total	1.66	1.46	0.87	0.53



## **Emission Reduction**





#### **Emission Reductions**

- Use of 15 ppm sulfur fuel for purchases in California
- Compliance with the 1998 MOU Compliance with the 1998 MOU (the Locomotive Fleet Average Agreement for the LA Basin) for nitrogen oxides
- 30% reduction in switch engine idling due to 2005 MOU
- Reduced idling from current locomotives with idle control devices
- Compliance with CARB rules for refrigerated units
- Compliance with CARB rules for off-road equipment
- Compliance with USEPA recent rules for locomotive emissions



## Summary

- The railroads recognize there are air quality concerns, both for ozone and for particulate matter in Southern California.
- People living adjacent to rail yards are exposed to similar risks as those faced by persons living adjacent to freeways and other major transportation facilities.
- Diesel emissions from rail yards are going down, near 63-68% reductions are projected from 2005 to 2020 even after annual activity growth rate.

